

SERIES GSA POWER SUPPLIES

DESCRIPTION - DETAS POWER SUPPLIES

Type GSA Power Supplies are components used to convert incoming voltage AC power to 24 volt DC output, either single phase or 3 phase regulated depending on the unit selected. The 24 volt DC standard size outputs are available 2.5 Amp to 120 Amp.

Other DC output voltages down to 5 VDC are also available.

Single Phase GSA Type SWLC

Seven different styles are packaged for space saving, easy mounting, and fast wiring. DIN RAIL mount power supplies have wide input voltage range of 100 thru 240Volt AC, (50/60Hz) with optional outputs of 5Volt DC to 24Volt DC. Output power range from 36 watts to 150 watts.

Three Phase GSA Type TOP

GSA Type TOP are available in 5 sizes, 400 thru 500Volt 50/60Hz. Output is 24Volt DC, adjustable +10%. Output current range options from 10Amp to 50Amp.

Other Power Supply Designs

Optional Series GSA Power Supplies are available with 5 Volt DC thru 24Volt DC outputs thru 120Amp.

INTERNATIONAL DIRECTIVES CE

Two European Directives are relevant to the manufacturer of power supplies: The low voltage Directive n.73/23/EEC and the EMC Directive 89/336/EEC. Both Directives must be applied in conjunction with the amending Directive 93/68/EEC for CE marking. These Directives are now in force and all the related products placed in the European union must carry the CE marking.

TWO CATEGORIES OF POWER SUPPLIES:

COMPONENT POWER SUPPLIES

Component Power Supplies for OEM are designed and produced to be "professionally installed" into a final product. "Professionally installed" means that the installer is technically competent and able to satisfy the requirements of the Directive applicable to the final product. The Component Power Supplies are intended to be incorporated in electrical panel equipment, as they are not complete in themselves.

As components they cannot fully comply with the requirements of all applicable Directives. This is dependent on the Professional Installer.

STAND ALONE POWER SUPPLIES

Stand Alone Power Supplies are intended for free standing operation in industries, laboratories, workshops and other areas.

As such these power supplies are field installed by the final user and his contactor.

Typical examples include bench units, free standing and wall mounted types.

LOW VOLTAGE DIRECTIVE 73/23/EEC

This Directive applies to almost all electrical and electronic equipment, designed to operate in the voltage range 50-1000VAC or 75-1500VDC. There are some exceptions such as elevators, equipment used in explosive atmospheres, and equipment used on ships, aircraft and railways.

According to the Directive the equipment must be "safe" and manufactured in accordance with the Principle Elements of the Safety Objective.

Stand Alone Power Supplies and Component Power Supplies shall be CE marked under the Low Voltage directive. Furthermore, a confirming Declaration of Conformity must be kept in a technical file for ten years following the manufacture of the last unit.

EXAMPLES of Harmonized Safety Generic Standards for the Power Supplies include:

-EN 60950 (UL1950)

(Information Technology, Business and Communication Equipment)

-EN 60204

(Safety of Machinery - Electrical Equipment of Machines)

Other more recent standards include:

-IEC 61508 (UL508) Functional safety: safety related systems

-IEC 61000-1-2 Ed. 1.0 Methodology for the achievement of functional safety of electrical and electronic equipment. (Revision to EN-61000)

CE, EU-EUROPEAN REQUIREMENT FOR POWER SUPPLIES

EN-61000-3-1 (IEC 1000-3-1)

An EMC Electric Noise Specification Restriction. Effective in 2001.

EN-61000-3-2

An important CE requirement: A Power Factor Correction Specification Requires PF correction to 99%.